

(19) W rld Intellectual Property Organization International Bureau





(43) International Publication Date 18 January 2001 (18.01.2001)

PCT

English

(10) International Publication Number WO 01/03737 A1

- (51) International Patent Classification⁷: A61K 39/395, 39/00, C07K 16/00, 1/00
- (21) International Application Number: PCT/US00/19336
- (22) International Filing Date: 13 July 2000 (13.07.2000)
- (25) Filing Language:
- (26) Publication Language: English
- (30) Priority Data: 60/143,458

13 July 1999 (13.07.1999) US

- (71) Applicant (for all designated States except US): BOLDER BIOTECHNOLOGY INC. [US/US]; 678 West Willow Street, Louisville, CO 80027 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): COX, George, N., III [US/US]; 678 West Willow Street, Louisville, CO 80027 (US). DOHERTY, Daniel, H. [US/US]; 719 Ithaca Drive, Boulder, CO 80303 (US).
- (74) Agents: BROWN, Theresa, A. et al.; Sheridan Ross P.C., Suite 1200, 1560 Broadway, Denver, CO 80202-5141 (US).

- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:

- With international search report.
- Before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments.

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.



1

(54) Title: IMMUNOGLOBULIN FUSION PROTEINS

(57) Abstract: The present invention relates to novel methods for making fusion proteins comprising a cytokine or growth factor fused to an immunoglobulin domain. The growth factor/cytokine can be fused directly to an immunoglobulin domain or through a peptide linker. The purified growth factor/cytokine-IgG fusion proteins produced by the novel methods are biologically active and can be used to treat diseases for which the non-fused growth factor/cytokine are useful.